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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,818	06/30/2000	Jiann H. Chen	81326D-W	2410

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EXAMINER

TSOV, ELENA

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/608,818	CHEN ET AL.	
	Examiner Elena Tsoy	Art Unit 1762	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

#### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 July 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## **DETAILED ACTION**

1. This is in response to Request for Reconsideration by the examiner filed on July 16, 2004 after BPAI decision.

### ***Declaration under 37 CFR 1.132***

2. The Declaration under 37 CFR 1.132 filed on July 16, 2004 is insufficient to overcome the rejection of claims 1-20 based upon Hartley et al (US 4,853,737) and incorporated by reference Lentz (US 4,257,699) in view of Schlueter, Jr. et al (US 5,995,796) and the rejection of claims 1-22 based upon Hartley et al (US 4,853,737) in view of Schlueter, Jr. et al (US 5,995,796) and Blong et al (US 5,549,948) as set forth in the last Office action, and Lewis and Kirk relied upon by the Board because none of references relied upon by Applicants, the Board and the Examiner indicate that elastomer does not include a thermoplastic polymer.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. **Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartley et al (US 4,853,737) and incorporated by reference Lentz (US 4,257,699) in view of Schlueter, Jr. et al (US 5,995,796), Kirk-Othmer (Encyclopedia of Chemical Technology, 1994) and Lewis (Hawley's Chemical Dictionary, 1997).**

Hartley et al, Lentz and Schlueter, Jr. et al are applied here for the same reasons as set forth in Paragraph No. 5 of the Office Action mailed on March 5, 2002 (Paper No. 3).

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Although "fluoroelastomer" Viton B of Hartley et al is substantially identical in structure and composition to that of claimed fluorocarbon thermoplastic random copolymer, Hartley et al do not expressly state that "fluoroelastomer" is thermoplastic.

It is well known in the art that elastomers, including fluoroelastomers, include both thermosetting and thermoplastic polymers, as evidenced by Lewis and Kirk in entirety, especially page 25 of Kirk.

Thus it is reasonable to conclude that the elastomers, such as Viton B of Hartley et al are embraced by the claimed fluorocarbon thermoplastic polymer because Viton B is uncured (non-crosslinked) elastomer having vinylidene fluoride, hexafluoropropylene and tetrafluoroethylene in proportions corresponding to those in the claimed fluorocarbon thermoplastic polymer. Viton B is cured after being coated onto the support as required by claim 1.

5. **Claims 1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartley et al (US 4,853,737) in view of Schlueter, Jr. et al (US 5,995,796), Blong et al (US 5,549,948), Kirk-Othmer (Encyclopedia of Chemical Technology, 1994) and Lewis (Hawley's Chemical Dictionary, 1997).

Hartley et al, Schlueter, Jr. et al and Blong et al are applied here for the same reasons as set forth in Paragraph No. 7 of the Office Action mailed on July 17, 2002, 2002 (Paper No. 5).

Although "fluoroelastomer" Viton B of Hartley et al is substantially identical in structure and composition to that of claimed fluorocarbon thermoplastic random copolymer, Hartley et al do not expressly state that "fluoroelastomer" is thermoplastic.

It is well known in the art that elastomers, including fluoroelastomers, include both thermosetting and thermoplastic polymers, as evidenced by Lewis and Kirk in entirety, especially page 25 of Kirk.

Thus it is reasonable to conclude that the elastomers, such as Viton B of Hartley et al are embraced by the claimed fluorocarbon thermoplastic polymer because Viton B is uncured (non-crosslinked) elastomer having vinylidene fluoride, hexafluoropropylene and tetrafluoroethylene in proportions corresponding to those in the claimed fluorocarbon thermoplastic polymer. Viton B is cured after being coated onto the support as required by claim 1.

***Response to Arguments***

6. Applicants' arguments filed June 7, 2004 have been fully considered but they are not persuasive.

(A) Applicants state on page 2 of the Request that the Applicants' fuser member overcoat is formed from a *cured* composition comprising a fluorocarbon thermoplastic polymer such as THV fluorothermoplastic. Lewis applies "thermoplastic" to uncrosslinked rubbers and "thermoset" to crosslinked fluoroelastomers such as *cured* Viton B. Therefore, cured Viton B fluoroelastomer Hartley et al is not thermoplastic.

First of all, in contrast to Applicants' statement, according to claim, a **non-cured** composition comprises a fluorocarbon thermoplastic random copolymer. Claim 1 recites clearly that a coating composition comprises a fluorocarbon thermoplastic random copolymer and a curing agent before curing.

Secondly, Viton B in Hartley et al is **uncured** (non-crosslinked) elastomer having vinylidene fluoride, hexafluoropropylene and tetrafluoroethylene in proportions corresponding to those in the claimed fluorocarbon thermoplastic polymer. Viton B in Hartley et al is cured *after* being coated onto the support as required by claim 1. Thus it is reasonable to conclude that the elastomers, such as Viton B of Hartley et al, are embraced by the claimed fluorocarbon

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thermoplastic polymer because Viton B is uncured (non-crosslinked) elastomer having vinylidene fluoride, hexafluoropropylene and tetrafluoroethylene in proportions corresponding to those in the claimed fluorocarbon thermoplastic polymer.

(B) Applicants argue that in contrast to Applicants' fluorocarbon thermoplastic *random* copolymer, thermoplastic elastomer of Kirk is typically multiphase block copolymer or mechanically blended mixture.

The Examiner respectfully disagrees with this argument. On page 18, Kirk states that not all thermoplastic elastomers are block copolymers or mechanically blended mixtures. It is sometimes possible to produce the rubber component *in situ* during polymerization (i.e. forming a random copolymer).

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (571) 272-1429. The examiner can normally be reached on Mo-Thur. 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ELENA TSOY  
PRIMARY EXAMINER



Elena Tsoy  
Primary Examiner  
Art Unit 1762

September 9, 2004